

Acute Gout: ACP Provides Guideline on Diagnosis

Key Points for Practice

- Synovial fluid analysis should be used to diagnose gout when the joint can be aspirated without significant patient discomfort.
- Synovial fluid analysis should also be performed when the clinical situation is uncertain and a probability of infection exists.
- A polarizing microscope and a trained operator are needed to detect the presence of urate crystals.

From the AFP Editors

This series is coordinated by Sumi Sexton, MD, Associate Deputy Editor.

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Gout is caused by excess urate crystals that accumulate in body tissue and fluid. This results in inflammatory arthritis. It is important to correctly diagnose and distinguish gout from other inflammatory arthritic conditions because treatments differ. The diagnostic standard for acute gout is joint aspiration with synovial fluid analysis for monosodium urate crystals; however, many patients are seen in a primary care or emergency medicine situation where synovial fluid analysis is rarely performed. The American College of Physicians (ACP) has developed a guideline for diagnosing adults with joint inflammation suspected to be gout.

Recommendation

The ACP recommends that all clinicians use synovial fluid analysis when diagnostic testing for gout in adults with joint inflammation is needed based on clinical judgment. Although the ACP recognizes that it is difficult to perform this test in a primary care setting, it remains the diagnostic standard for acute gout. A misdiagnosis or delayed diagnosis can lead to unnecessary surgery

or hospitalization, delays in treatment, and needless prescribing of long-term treatment.

Synovial fluid analysis should be used when the joint can be aspirated without significant patient discomfort and should be performed by an experienced physician who can minimize the risk of infection. A polarizing microscope and a trained operator are needed to detect the presence of urate crystals. Synovial fluid analysis should also be performed when the clinical situation is uncertain and a probability of infection exists. If the physician cannot meet these criteria, the patient should be referred to a subspecialist who can perform this test. Although clinical prediction tools to detect gout exist, there is insufficient evidence to distinguish other diagnoses such as a septic joint. Therefore, a specific clinical algorithm for diagnosing gout cannot be recommended at this time.

Guideline source: American College of Physicians

Evidence rating system used? Yes

Systematic literature search described? Yes

Guideline developed by participants without relevant financial ties to industry? No

Recommendations based on patient-oriented outcomes? Yes

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JENNIFER WILKES, AFP Senior Associate Editor ■